CLAIMS:

1. An electrochemical cell for testing the electrochemical behaviour of a plurality of materials, said cell comprising:

a first electrode;

a counter-electrode bearing an electrochromic material whose reflection, refraction or absorption of electromagnetic energy changes in a manner proportional to the total charge passed through it; and

an electrolyte between and in electrical contact with the first electrode and the counterelectrode;

wherein one of said first electrode and said electrolyte comprises a plurality of regions, each region comprising a sample of material to be tested, the regions being, in the case of the first electrode, electrically connected to a common terminal.

- 2. An electrochemical cell according to Claim 1, in which the material to be tested is an electrocatalyst, and the electrolyte contains the material whose reaction is to be catalysed by said electrocatalyst.
- 3. An electrochemical cell according to Claim 1 or Claim 2, in which the first electrode comprises a plurality of regions of the material to be tested.
- 4. An electrochemical cell according to any one of the preceding Claims, in which the electrolyte comprises a plurality of regions of the material to be tested.
- 5. An electrochemical cell according to any one of the preceding Claims, in which the electrochromic material is tungsten oxide.
- 6. An electrochemical cell according to any one of the preceding Claims, in which a reference electrode is contacted with the electrolyte for potential measurement and control.